

POLOGRUDOV, V.A.

Practical testing of student knowledge, skills, and habits.  
Fiz. v shkole 23 no.5:75-78 S-O '63. (MIRA 17:1)

1. Pedagogicheskiy institut, Kemerovo.

TRUFANOVA, A. S., uchitel'nitsa; KHOLODENKO, L. P., uchitel'nitsa;  
OBLACHKO, V. G., uchitel'nitsa; POLOGRUDOV, V. A. (g. Kemerovo);  
IOCH, E. V., uchitel'

Editor's mail. Khim. v shkole 17 no.4:87-89 J1-Ag '62.  
(MIRA 15:10)

1. Srednyaya shkola No. 26, Orel (for Trufanova). 2. Srednyaya  
shkola No. 11, Ussuriysk (for Kholodenko). 3. Srednyaya shkola  
No. 3 Kubanskogo zernosovkhoza Krasnodarskogo kraya (for  
Oblachko). 4. Kirovskaya srednyaya shkola, Primorskiy kray  
(for Ioch).

(Chemistry—Study and teaching)

POLOGRUDOV, V.A. (Kemerovo)

Testing students' knowledge of physics in the senior grades of  
secondary schools. Fiz. v shkole 22 no.2:71-75 Mr-Apr '62.

(MIRA 15:11)

(Physics--Study and teaching)

I 49271-65 EWT(1)/EWT(m)/EWP(t)/EWP(z)/EWP(b) Pad/Pi-4 IJP(c) JD/HW  
ACCESSION NR: AP5009529 S/0048/65/029/003/0490/0492

AUTHOR: Parfianovich, I.A.; Pologrudov, V.V.

TITLE: On the memory effect in the action of an electric field on the luminescence of alkali halide phosphors /Report, 12th Conference on Luminescence held in L'vov, 30 Jan-5 Feb 1964/

SOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya, v. 29, no. 3, 1965, 490-492

TOPIC TAGS: luminescence, luminescent crystal, x ray, electric field, sodium chloride, nickel, potassium compound, bromine compound, indium

ABSTRACT: The authors have investigated the effect of pre-exposure to an electric field on the roentgenoluminescence of KBr:In and NaCl:Ni phosphors. The crystal phosphors were subjected to a  $1-5 \times 10^5$  V/cm electric field between electrodes with which they were not in contact and were subsequently excited by 20 keV x-rays. In the case of the KBr:In phosphors the duration of exposure to the electric field was varied from a few seconds to several minutes. Five seconds after the field was removed the exciting x-rays were applied and the time variation of the resulting luminescence was followed. The initial intensity of the lumin-

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ACCESSION NR: AP5009529

esence was much (up to 11 times) greater than without previous exposure to an electric field. This luminescence decayed rapidly at first, (half-time several tens of seconds) but subsequently increased and reached a maximum one or two minutes after the beginning of the excitation. As a function of duration of exposure to the electric field, the initial intensity of the fluorescence increased rapidly, reached a maximum for an exposure of the order of a few seconds, and decreased with further increase of the exposure. The luminescence intensity at the subsequent maximum increased monotonically with duration of exposure to the electric field. The NaCl:Ni phosphors were exposed to the electric field for 6 min and subsequently excited to luminescence by x-ray pulses of 2 sec duration. The intensity of the luminescence flashes was greater when the phosphor was previously exposed to the electric field than when it was not. The maximum intensity of the luminescence flashes was reached approximately one minute after exposure to the field. Orig. art. has: 3 figures.

ASSOCIATION: Irkutskiy gosudarstvennyy universitet (Irkutsk State University)

SUBMITTED: 00.

ENCL: 00

SUB CODE: OP, SS

NR REF SOV: 004

OTHER: 003

Card <sup>mt</sup> 2/2

ACC NR: AP7004998

SOURCE CODE: UR/0048/66/030/009/1542/1544

AUTHOR: Pologrudov, V. V.

ORG: Irkutsk State University im. A.A.Zhdanov (Irkutskiy gosudarstvennyy universitet)

TITLE: Effect of an electric field on the luminescence of KI:Tl phosphors [Report, Fourteenth All-Union Conference on Luminescence (Crystal Phosphors) held at Riga, 16-23 Sept. 1965]

SOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya, v.30, no.9, 1966, 1542-1544

TOPIC TAGS: luminescence, luminescent crystal, potassium compound, iodide, thallium, luminescence quenching, electric field, temperature dependence, x-ray irradiation

ABSTRACT: The author and E.E.Penzina (Izv. AN SSSR. Ser. fiz., 29, 497 (1965)) have previously found that an electric field tends to quench the photoluminescence of a KI:Tl phosphor excited in the activator absorption bands and tends to enhance the roentgenoluminescence, and have hypothesized that the quenching action is due to an external quenching mechanism and that the enhancement of the roentgenoluminescence is due to reduction by the field of the recombination losses. In the present paper the author presents further experimental results supporting these hypotheses. The apparatus and experimental technique have been described elsewhere by the author and I.A.Parfianovich (Sb. Optika i spektroskopiya, No.1, 317 (1963)). It was found that

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ACC NR: AP7004998

the roentgenoluminescence intensity decreases with increasing temperature from room temperature to 300° C. At temperatures above 50° C (but not at lower temperatures) the relative roentgenoluminescence intensity of a heavily x-irradiated specimen was higher than that of an unirradiated one; this is ascribed to thermal dissociation of radiation-induced defects. The enhancement of the roentgenoluminescence by the action of a  $10^5$  V/cm 400 Hz field decreased with both increasing temperature and increasing activator concentration, and at high temperatures the electric field tended to quench the roentgenoluminescence of specimens having high activator concentrations. The most rapid decrease of the enhancement factor with increasing temperature took place in the same temperature interval from 30 to 80° as did the most rapid drop in the roentgenoluminescence intensity. The interpretation of these findings is discussed. Orig. art. has: 2 figures.

SUB CODE: 20

SUBM DATE: none

ORIG. REF: 003

Cerd 2/2

PARFIANOVICH, I.A.; POLOGRUDOV, V.V.

Memory effect of the action of an electric field in alkali halide  
phosphors. Izv. AN SSSR. Ser.fiz. 29 no.3:490-492 Mr '65.

(MIRA 18:4)

1. Irkutskiy gosudarstvennyy universitet.



POLOGRUDOV, V.V.; PENZINA, E.E.

Processes taking place in excited KI - Tl phosphors when placed  
in an electric field. Izv. AN SSSR. Ser.fiz. 29 no.3:497-499  
Mr '65. (MIRA 18:4)

1. Irkutskiy gosudarstvennyy universitet.

L 28326-66 EWT(m)/EWP(t)/ETI IJP(c) JD

AEC NR: AP6013091

SOURCE CODE: UR/0048/66/030/004/0719/0721

AUTHOR: Parfianovich, I.A.; Pologrudov, V.V.; Karnaukhov, Ye.N.

46  
B

ORG: Irkutsk State University (Irkutskiy gosudarstvennyy universitet)

TITLE: Effect of an electric field on the roentgenoluminescence of NaCl:Cu phosphor  
Report, Fourteenth Conference on Luminescence held in Riga 16-23 September 1965

SOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya, v. 30, no. 4, 1966, 719-721

TOPIC TAGS: luminescence, electric effect, sodium chloride, crystal phosphor, roentgenoluminescence, electric field, x ray irradiation

ABSTRACT: It is known that an electric field can affect the recombination luminescence of alkali halide phosphors; the electric field may either enhance or quench the luminescence, depending on the composition of the phosphor and the experimental conditions. In some cases, however, both of these effects may occur simultaneously. Such a dual effect, in particular, was observed by the authors in investigating the influence of an electric field on the luminescence of type I centers in NaCl:Cu. The specimens all were grown from a melt (1 mole % copper in the melt) and activated to different degrees by thermal diffusion. The specimens were prepared in the form of single crystal plates (0.18 mm thick) and were mounted between two electrodes: one the furnace rod with a platinum cap and the other a metal grid. The phosphor was excited through

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L 28326-66

A/C NR: AP6013091

the grid electrode by x rays from a BSV2-Fe tube operated at 20 kV and 15 mA. At the same time there was applied to the crystal specimen a 50 cycle alternating field having a strength of about  $10^5$  V/cm. The luminescence was isolated by a UFS-1 ultra-violet filter and recorded by an FEU-18A photomultiplier coupled to a mirror galvanometer. The character of the effect of the electric field differs at different sections of the roentgenoluminescence time curve. Thus, for example, for the phosphor with 1 mole % copper during the first seconds of excitation the electric field quenches the luminescence, but with increase of the x-ray dose the quenching is reduced, and some 15-20 sec after the beginning of excitation the luminescence is enhanced at the instant of application of the field. Thus, the quenching and stimulating effects compete. Temperature studies showed that with increase of the temperature the quenching process increasingly dominates and beginning with about  $75^\circ\text{C}$  is the only effective one. The following inferences are drawn on the basis of the experimental results regarding the processes that may occur in the crystal incident to application of an electric field. The mechanism responsible for enhancement of the luminescence is release of electrons from shallow traps. With increase of the activator concentration the number of defects relative to the number of luminescence centers is reduced so that the stimulation by the electric field is diminished. Holes are released from the activator trapping levels and drop into the valence band. Migration of weakly bound activator ions also leads to decrease of the luminescence intensity. That such migration occurs follows from the high mobility of copper ions and the existence of a memory effect. Orig. art. has: 2 figures and 1 table.

SUB CODE: 20/

SUBM DATE: 00/

ORIG REF: 005/

OTH REF: 002

Card 2/2 *CL*

L 49270-65 EWT(1)/EWT(m)/EWP(t)/EWP(b) P1-4 IJP(c) JD  
 8/0048/65/029/003/0497/0499  
 31  
 B  
 ACCESSION NR: AP5009531

AUTHOR: Pologrudov, V.V.; Penzina, E.E.

TITLE: Investigation of the processes occurring in excited thallium activated potassium iodide phosphors upon application of an electric field [Report, 12th Conference on Luminescence, held in L'vov 30 Jan-5 Feb 1964]

SOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya, v. 29, no. 3, 1965, 497-499

TOPIC TAGS: luminescence, alkali halide, potassium compound, iodine compound, thallium, x ray, photoluminescence, electric field  
 27

ABSTRACT: The authors have investigated the influence of a  $5 \times 10^4$  V/cm 50 c/sec electric field on the roentgenoluminescence and photoluminescence of KI:Tl phosphors. The electric field had both a quenching and a stimulating effect on the roentgenoluminescence. When the activator concentration was large (c. 1 mole per cent) and the stimulating x-ray intensity was low, the quenching effect was predominant. Under some conditions both effects could be observed, the fluorescence intensity decreased immediately when the field was applied and subsequently increased beyond its initial value. There are two bands in the photoluminescence spectrum. Thermal

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L 43270-55

ACCESSION NR: AP5009531

quenching was observed in both bands, and most strongly in the shorter wavelength band; when the temperature was increased from room temperature the photoluminescence intensity decreased and the peaks of both excitation bands shifted toward the longer wavelengths. The thermal quenching was observed as soon as the temperature was raised above room temperature. This is in contradiction with the finding of K.K.Shvarts (Tr. In-ta fiz. i astron. AN EstSSR, No. 7, 153 (1958)). It is suggested that this discrepancy may be due to Shvarts' failure to take account of the shift in the positions of the excitation bands. The results are discussed briefly. The most likely mechanism for the stimulation of the luminescence by an electric field is considered to be the reduction by the action of the field of the number of nonradiative recombinations outside the luminescence centers. More data will be required before the true mechanism can be determined. Orig. art. has: 2 figures and 1 table.

ASSOCIATION: None

SUBMITTED: 00/

ENCL: 00

SUB CODE: OP, SS

NR REF SOV: 005

OTHER: 005

Caid 2/2

L 13973-55 EWP(e)/EWT(m)/EWP(t)/EWP(b) IJP(c)/AEDC(a)/AS(mp)-2/SSD/AFWL/  
ASD(a)-5/ASD(m)-3/AFMDC/ESD(c)/RAEM(e)/ESD(t) JD/WH

ACCESSION NR: AP4043010

S/0051/64/017/002/0230/0234

AUTHOR: Pologrudov, V. V.; Penzin, Yu. G.; Penzina, E. E.

TITLE: Electroluminescence of diamonds <sup>15</sup> B

SOURCE: Optika i spektroskopiya, v. 17, no. 2, 1964, 230-234

TOPIC TAGS: diamond, electroluminescence, luminescence brightness,  
spectral energy distribution, frequency dependence, phosphor

ABSTRACT: The electroluminescence described in the article was observed on diamonds insulated from the electrodes, in contrast to the practice of all earlier researchers who placed the diamond in direct contact with the electrodes so as to improve the conditions for the carrier injection as much as possible. The diamonds were placed in an alternating field so that internal electroluminescence (Destriau effect) was produced. Sixty-four out of 105 samples of Siberian diamonds exhibited a tendency to such luminescence, and

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ACCESSION NR: AP4043010

those which did not luminesce were essentially of regular geometrical form without visible inclusions. The diamonds ranged in thickness from 1 to 5 mm. The exciting voltage came from a step-up transformer operating at 50 cycles. Visible glow was produced at field intensities on the order of  $10^3$ -- $10^4$  v/cm and upward. The tests have shown that at different types of excitation, the same centers participate in the glow, although the ratio of the different bands varies over a wide range. Such a difference in the spectral distribution is credited to the peculiarities of the excitation mechanism in each individual case. The variation of the brightness of the electroluminescence with the electric field intensity was the same for all diamonds, the logarithm of the intensity being inversely proportional to the reciprocal of the square root of the voltage. The frequency dependence of the electroluminescence was investigated at frequencies 250--8000 cps and at voltages from 250 to 600 v. The electroluminescence brightness increased strongly with the frequency at high voltages, but reaches saturation or even a maximum at medium and low

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ACCESSION NR: AP4043010

voltages. Oscillographic studies were also made of the time variation of the brightness during each cycle of the exciting voltage (brightness waves). These brightness waves were shifted in phase relative to the applied voltage, the shift differing with the type of diamond. The results demonstrate that certain types of diamonds indeed exhibit the Destriau effect and that the mechanism of glow of diamond does not differ in an alternating electric field from the electroluminescence of zinc sulfide phosphors, "We are very grateful to E. S. Vilutis for help with the work." Orig. art. has: 4 figures and 1 formula.

ASSOCIATION: none

SUBMITTED: 21May63

ENCL: 02

SUB CODE: OP

NO REF SOV: 006

OTHER: 007

Card 3/5



L 13973-65

ACCESSION NR: AP4043010

ENCLOSURE: 01

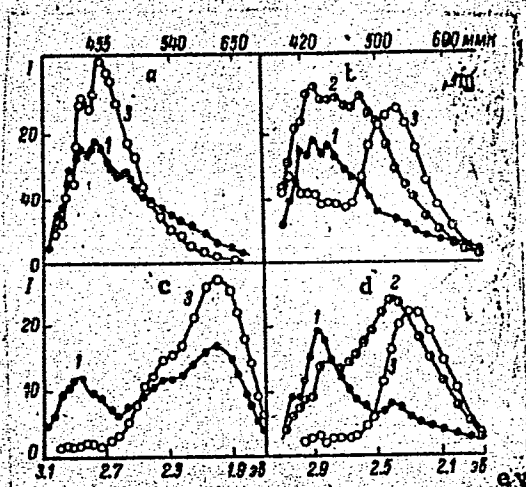


Fig. 1. Electroluminescence

1 - X-ray luminescence; 2 - and photoluminescence; 3 - spectra of diamonds for different interelectrode distances, exciting voltages, and excitation wavelengths

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L 13973-65

ACCESSION NR: AP4043010

ENCLOSURE: 02

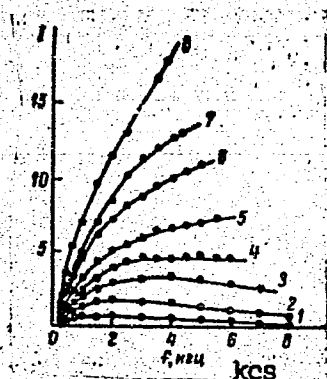


Fig. 2. Dependence of electroluminescence brightness on frequency for one sample at different excitation voltages

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L 19504-63 EWA(h)/EWT(1)/EWP(q)/EWT(m)/EWP(B)/BDS AFFTC/ASD/APGC/  
AFWL/IJP(C)/SSD WW/JD  
ACCESSION NR: AT3002242 S/2941/63/001/000/0317/0320

AUTHORS: Parfianovich, I. A.; Pologrudov, V. V. 2/

TITLE: X-ray electroluminescence of alkali-halide monocrystalline phosphors

SOURCE: Optika i spektroskopiya; sbornik statey. v. 1. Lyuminestsentsiya.  
Moscow, Izd-vo AN SSSR, 1963, 317-320

TOPIC TAGS: electroluminescence, excitation, electric field, activator

ABSTRACT: A detailed study was made of the x-ray electroluminescence of the monocrystalline phosphors NaCl, NaCl-Cu, KBr, KBr-In<sup>+</sup>, KBr-In<sup>3+</sup>, KJ, and KJ-Tl. The specimens were in form of plates placed between a copper electrode and a metallic screen to which a sinusoidal voltage was applied, from 50 cycles to 21 k-cycles at 0 to 1100 volts. It was found that luminescence brightness and the phosphorescence of these alkaline-halides, under x-ray excitation, changed with the variable electric field. Data was obtained relating this effect to the voltage and frequency of the applied field, radiation wave length, and activator concentration. It is shown that the electric field can both enhance and reduce luminescence brightness. Orig. art. has: 4 figures and 2 tables.

Cord -1/2

RUMANIA

OLTEANU, M., Lieutenant-Colonel, Medical Corps; CHINTA, Gh., Lieutenant-Colonel, Medical Corps; BOERAS, F., Captain, Medical Corps; and POLOJINTEV, C., Major, Medical Corps.

"Perilimbic "Horseshoe" Prosthesis Favorizing the Performance of the Suture in Perforating Total or Sub-Total Corneal Transplant"

Bucharest, Revista Sanitara Militara, Vol 16, Special No., 1963; pp 246

**Abstract:** Brief description of experimental studies on animals and cadavers, apparently followed clinically in unstated number of patients, with utilization of a plastic prosthesis to assist in the performance of the operation.

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Major, Medical Corps; and MARIETA, Petre, Dr.

"Transplantation of Corneal Layer Homografts with Different Type of Preservation. New Possibilities of Action for the Clarification of the

**APPROVED FOR RELEASE: 06/15/2000** **CIA-RDP86-00513R001341820008-4"**

Bucharest, Revista Sanitara Militara, Vol 16, Special No., 1965; pp 243-246

**Abstract:** Data on 54 operations of corneal transplantation done at Central Military Hospital, Bucharest, in 18 months; local irradiation treatment and pre- and post-operative use of fresh (3) dried (3) lyophilized (1) and cold-stored (18) corneal transplants; use of hydrocortisone, gamma globulin and hyaluronidase topically in order to prevent vasculature from infiltrating the graft. Except in one group of 11 patients with nearly total transplants, results were very promising. 1 table.

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Continued by 5 to 12 months follow-up in 4 cases, 1 failure in a patient in whom poor attachment of the drainage tube brought about obstruction of the newly created duct.

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report presented at the 1st All-Union Congress of Theoretical and Applied Mechanics, Moscow, 27 Jan - 3 Feb '60.

203. A. G. Kikhalo (Leningrad): Variational methods in the theory of elasticity.
204. A. A. Merzhan (Moscow): The stability of motions of solids - Lagrange's theorem for solids and its derivation.
205. A. A. Merzhan (Moscow): Approximate asymptotic flutter of a circular cylindrical shell.
206. A. A. Merzhan (Moscow): On the asymptotic of the solution of the problem of the stability of a circular plate under relatively small loads.
207. A. A. Merzhan (Moscow): The determination of the deformation of trusses without diagrams.
208. A. A. Merzhan (Moscow): A theory of generation of thin plates and shells.
209. A. A. Merzhan (Moscow): Some problems in the theory of "silver" stability.
210. N. N. Kuznetsov (Moscow): Vibrations of an elastic circular cylindrical shell under concentrated impact loading.
211. N. N. Kuznetsov (Moscow): More accurate equations of motion for circular cylindrical shells.
212. V. A. Rabinovich (Leningrad): Approximate treatment of cylindrical shells under concentrated loads.
213. A. A. Rabinovich (Moscow): Redistribution of reactions at the edge of a simply supported rectangular plate under gradually increasing loading.
214. V. A. Rabinovich (Moscow): Some structural problems of thermoelasticity.
215. A. A. Rabinovich (Moscow): Investigation of the viscous behavior of elastic, viscoplastic materials in vibrations.
216. A. A. Rabinovich (Moscow): Problems of the non-linear theory of elasticity.
217. A. A. Rabinovich (Moscow): In the theory of elasticity, a method is proposed to the theory of the stability of structures.
218. A. A. Rabinovich (Moscow): The method of electroplating and its applications.
219. A. A. Rabinovich (Moscow): Two-dimensional problems in the theory of plasticity of non-homogeneous and anisotropic media.
220. A. A. Rabinovich (Moscow): The state of stress in a deformed curved bar.
221. V. A. Rabinovich (Leningrad): A membrane theory for a curved shell.
222. V. A. Rabinovich (Moscow): Creep, elastic properties and anisotropy of plastic materials.
223. A. A. Rabinovich (Moscow): A practical method of designing reinforced concrete structures with reference to creep.
224. A. A. Rabinovich (Moscow): The problem of structural damping.
225. A. A. Rabinovich (Moscow): An approximate method for solving elastic-plastic problems.
226. A. A. Rabinovich (Moscow): Application of the theory of rigid, plastic solids to problems of metal forming.
227. A. A. Rabinovich (Moscow): On the anisotropic problem of the theory of elasticity.
228. A. A. Rabinovich (Moscow): A method for studying the plane field of relative volume strains in solids.
229. A. A. Rabinovich (Moscow): The application of some new methods of the theory of elasticity to the solution of problems of the theory of elasticity.
230. A. A. Rabinovich (Moscow): Free and forced vibrations of structures with internal dissipation.
231. A. A. Rabinovich (Moscow): Investigation and calculation of internal friction in elastic members of vibrating machines.
232. A. A. Rabinovich (Moscow): An elementary illustration of stresses in three-dimensional layered solids.

POLOKHIN, P. N.

Methods for soldering aluminum used in the manufacture of  
instruments. Priborostroenie no.11:31-32 N '61. (MIRA 14:10)  
(Solder and soldering)

POLOKHIN, P.N.

Soldering of aluminum in the manufacture of appliances.  
Mashinostroyeniye 11 no.5:30-31 My '62.

POLOKHIN, P.N.

Methods of aluminum soldering in the construction of instruments.  
Ratsionalizatsiia no.2:24-25 '62.



ARKHIPOV, V.V.; POLOKHIN, P.N.

Recording devices. Priborostroenie no.1:26-29 Ja '60.  
(MIRA 13:5)

(Recording instruments)

1.2400

29337  
S/119/61/000/011/005/005  
D209/D301

AUTHOR: Polokhin, P.N. Engineer

TITLE: Methods of aluminum soldering in the instrument industry

PERIODICAL: Priborostroyeniye, no.11, 1961, 31-32

TEXT: In order to replace the expensive copper conductors by aluminum and its alloys in industry a telecommunication research institute in Czechoslovakia developed a reduction method of soldering of thin aluminum alloy conductors and foils (Al-Cu-Mg; Al-Mg-Si; Al-Cu-Ni). The method is based on the capacity of the reducing solution to dissolve the aluminum oxide film and deposit 2-3  $\mu$ k layer of nickel or zinc on the clean surface. The nickel solution working at 20°C proved to be best. X  
The process is completed in 30-40 sec. The solution contains 400 g/l of nickel chloride, 20 g/l of hydrofluoric acid and

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Methods of aluminum ...

29337  
S/119/61/000/011/005/005  
D209/D301

material. The solder utilized in the tinning process consists of a zinc, cadmium and lead alloy. The alloy containing 60% cadmium and 40% of tin (melting point + 235°C) was found to be the best. Siemens recommend pure tin (99.9%). In order to increase the electrical conductivity of the soldered junction 0.5 - 1% of silver is added to the solder. There are 4 figures and 2 Soviet-bloc references.

Card 3/3

ZAYTSOV, L.A., inzh.; POLOTNIN, V.P., inzh.

Method of approximate power analysis of the fabric-moving mechanism  
of Class 22 sewing machine. Izv.vys.ucheb.zav.;tekh.leg.prom.  
no.4:136-146 '62. (MIRA 14:16)

1. Leningradskiy tekstil'nyy institut imeni S.M. Kirova.  
Rekomendovana katedroy proyektirovaniya tekstil'nykh mashin.  
(Sewing machines--Testing)

POLOKHOV, V.

Dike complex in the Kavalerove ore region. Biul. MOIP. Otd.  
geol. 34 no.6:143 N-D '59. (MIRA 14:3)  
(Kavalerovo region—Dikes(Geology))

POLOKHOV, V.P.

Alabandite and other manganese minerals from a cassiterite-sulfide deposit in the southern Maritime Territory. Izv. vys. ucheb. zav.; geol. i razv. 2 no.7:80-88 J1 '59 (MIRA 13:3)

1. Krasnoyarskiy institut tsvetnykh metallov i zolota.  
(Maritime Territory--Manganese)

L 44115-66 EWT(m)/EWP(j)/T RM  
ACC NR: AP6021367 (A) SOURCE CODE: UR/0342/66/000/003/0071/0072

AUTHOR: Smirnov, L. S., (Director, Candidate of Technical Sciences);  
Polokhova, S. S., (Senior Research Associate) //

ORG: Ukrainian Scientific Research Institute for the Processing of Artificial and Synthetic Fibers. [UkrNIIPV] (Nauchno-issledovatel' skiy institut po pererabotke iskusstvennykh i sinteticheskikh volokon) 0

TITLE: Some physicommechanical properties of bulked yarns

SOURCE: Tekstil' naya promyshlennost' , no. 3, 1966, 71-72

TOPIC TAGS: bulked yarn, chemical filament, banlon fiber, elastic fiber, meron fiber, fluflon fiber, agilon fiber, spun fiber chemical fiber, crimp

ABSTRACT: The article describes tests made to determine the amount of crimp and the elasticity of various types of bulked yarns, including fluffy, elastic, and meron yarns from the USSR and banlon, fluflon, agilon, and spun yarn from the USA. The amount of crimp was determined by a method developed at the Central Scientific Research Institute for Wool, (TsNIIShersti) mentioned in another work

Card 1/2

UDC: 677.494.001.4

Card 2/2 90

POLOKOWSKI, N. N.

918. MANUFACTURE OF QUALITY STEEL IN RUSSIA, N. N. Polokowski, Univ. College; MEYAL PROGRESS Mar '51 (59-3 1951); pp 389-393; 1 p.

The author tells of some of the difficulties the steelmaker faces in the "workers' paradise," some of them due to the necessity of conforming—at least ostensibly—to official regulations governing details of technical practice worked out to cover ideal situations. There is little that is novel or outstanding in the Russian iron and steel industry, which could be considered as an advance when compared with Western practice. The quality of raw and auxiliary materials is often low. Metallurgists must labor with high-ash coke, fuel oil with up to 2% sulfur, and admittedly poor refractories—particularly dinas bricks. Tools are scarce, control instruments crude, and spares are usually difficult to get. Considering all this, one has to give much credit to Russian engineers and craftsmen who produce usable steel under difficult conditions.



POLOMAC, Ljubodrag; BOGDANOV, Dusko

Application of the machines of a punched card system to the  
material bookkeeping. Mehanografija 2. ~~no.~~ 3:9-21 Mr '61.

SMRCKA, J.; POLOMIS, V.

Some observations on ulcers. Cas. lek. cesk. 102 no.11:281-287 15  
Mr '63.

1. II. vnitřní oddělení Ústřední vojenské nemocnice v Praze, přednosta  
MUDr. J. Smrcka.

(PEPTIC ULCER) (STRESS) (APPENDICITIS) (SMOKING)

HAUER, J.; FRKAL, A.; POLOMIS, V.

Gastrointestinal hemorrhage as a complication of steroid therapy. Cesk. gastroent. vyz. 19 no.6:340-345 S '65.

1. II. vnitřní oddělení UVN v Praze (vedoucí MUDr. J. Smrčka).

SMRCKA, Jiri; POLOMIS, Václav

Our experiences with bronchopneumonia. Cas. lek. česk. 97 no.14:  
439-445 4 Apr 58.

1. II. vnitřní oddělení UVN v Praze-Střesovicích, přednosta Dr. Jiri  
Smrcka. J. S., Praha-Střesovice, Na Větrníku 1550.  
(BRONCHOPNEUMONIA, differ. diag.  
from other types of pneumonia (Cz))

SARCKA, Jiri; POLOMIS, Vaclav

Rheumatic pneumonia. Cas. lek. cesk. 97 no. 14:445-451 4 Apr 58.

I. II. vnitřní oddelení UVN v Praze-Střesovicích, přednosta Dr. Jiri  
Sarcka. J. S., Praha-Střesovice, UVN.

(PNEUMONIA

rheum. (Cz))

SMRCKA, J.; BRET, J.; HAUER, J.; POLOMIS, V.

Contribution to the diagnosis and therapy of liver metastases  
of a nesidioma. Cas. Lek. Cesk. 103 no.17:477-478 Ap 24 '64.

1. II. vnitřní oddělení UVN v Praze (vedoucí MUDr. J. Smrcka)  
a Rentgenologické oddělení UVN v Praze (vedoucí MUDr. F. Sykora).

TUREK, J.; SKALA, I.; POLOMISOVA, L.; Technicka spoluprace: LAMACOVA, L.

Our experiences with a new cholinolytic, oxyphenhydrazonium bromide (VUFB 3118). Cas.lek. cesk. 103 no.8:209-213  
21 F'64.

1. I. interni oddeleni Thomayerovy nemocnice, Praha-Krc;  
vedouci: MUDr. J.A.Trojan); Ustav pro vyzkum vyzivy lidu  
v Praze (reditel: prof.dr. J. Masek) a Ocni oddeleni  
Thomayerovy nemocnice, Praha-Krc (vedouci: MUDr.M.Exnerova).

POLOMISOVA, Libuse; STOJANOVA, Alena.

Cortisone and ACTH therapy of eye diseases. Cesk. ofth. 15 no.2:131-137 Apr 59.

1. Oeni oddeleni Thomayerovy nemocnice v Praze 14, prednosta MUDr. Marie Exnerova.

(EYE DISEASE, ther.

ACTH & cortisone, review (Cz))

(ACTH, ther. use,

eye dis., review (Cz))

(CORTISONE, ther. use,

same)



POLOMISOVA, Libuse, MUDr.

Personal experiences with diamox. Cesk. ofth. 13 no.5:379-381 Sept 57.

1. Očni oddeleni Thomayerovy nemocnice V Praze 14, prednosta prim. Dr.  
Marie Exnerova.

(ACETAZOLAMIDE, ther. use  
glaucoma (Cz))

(GLAUCOMA, ther.  
acetazolamide (Cz))

POLOMSKI, Eugeniusz

Necrosis of bones following electric burns. Pol. przegl.  
chir. 37 no.7:685-688 J1 '65.

1. Z I Kliniki Chirurgicznej AM w Poznaniu (Kierownik:  
prof. dr. S. Nowicki).

POLOMSKI, Eugeniusz

Vasomotor changes following adrenalectomy in Raynaud's disease. Pol. przegl. chir. 37 no.9:845-852 S '65.

1. Z I Kliniki Chirurgicznej AM w Poznaniu (Kierownik: prof. dr. St. Nowicki).

POLOMSKI, Jozef, mgr.,inz; SERBENSKI, Andrzej, inz.; ANGRES, Herbert, inz.

Changes in the process of preparing charge mixtures for coke production. Energetyka przem 10 no.3:106 '62.

1. Zakłady Koksownicze "Jadwiga", Zabrze-Biskupice.

POLOMSKI, Z.

Identification cards in blood banks. Szpital.polsk. 3 no.4:583-586  
1950. (CLML 20:6)

POLOMSKI, Z.

"Herbs cure; Degrosan helps obese people", p. 10, (ZDROWIE, Vol. 5, No. 8, 1953,  
Warszawa, Poland)

SO: Monthly List of European Accessions, L.C., Vol. 3, No. 4, April, 1954

POLOMSKY, Pavel, inz.

Applying the 1942 coordinate system on mine maps. Geol pruzhum 6  
no.5:149-150,154 My '64.

1. Geologicky prieskum National Enterprise, Zilina.

POLOMSKY, Pavel. inz.

Control of the parameters of shaft mining equipment. Geol  
pruzkum 6 no.2:39-41 F'64

1. Geologicky prieskum, n.p., Zilina.



POLOMSKY, Pavel, inz.

Observation on landslides near Banovce nad Bebravou. Geol  
pruzkum 5 no.7:206-207 J1 '63.

1. Geologicky prieskum, n.p., Zilina.

POLONCHUK, F.M.

USSR/ Engineering - Cutting tools

Card 1/1 : Pub. 128 - 12/25

Authors : Brushteyn, B. E., and Polonchuk, F. M.

Title : A new type of chip breaker

Periodical : Vest. mash. 1, 62-63, Jan 1954

Abstract : A description is presented of two newly designed chip breakers with curvilinear cutting edges made of type 45 steel. These chip breakers are designed for cutting alloy and carbon steels at feeds of  $\approx 0.08 \div 2$  mm/rotation, and cutting speeds of  $\approx 50 \div 600$  mm/min. Drawings.

Institution : .....

Submitted : .....

POLONCHUK, N.S. [Palanchuk, N.S.]

Relation between the current growth of oak and the development of assimilation apparatus and root system.  
Vestsi AN BSSR. Ser. bial. nav. no.2:11-15 '65.

(MIRA 18:12)

POLONCHUK, N.S.

Pure and mixed plantations of oak in oak-dominant forests  
with optimum soil moisture. Bot.; issl.Bel.otd.VBO no.7:129-  
138 '65. (MIRA 18:12)

KOLOTILOVA, L.V.; POLONCHUK, T.M.; SILINA, S.F.

Comparative data on whooping cough incidence in children vaccinated and unvaccinated with antipertussis preparations. Zhur. mikrobiol., epid. i immun. 41 no.4:25-29 Ap '64. (MIRA 18:4)

1. L'vovskiy institut epidemiologii, mikrobiologii i gigiyeny.

HORNUNG, Stanislaw; KOWALCZYKOWA, Janina; PARYSKI, Edwin; KULIG, Andrzej;  
LATAK, Zofia; POLONCZYK, Mieczyslaw; WASOWICZ, Anna

The course and morphological picture of experimental tuberculosis  
in guinea pigs produced by the strains of Mycobacterium tuberculo-  
sis isolated from patients treated by INH. Gruzlica 27 no.7:621-  
640 JI.'59.

1. Z Kliniki Petyzjacyjnej A.M. w Krakowie. Kierownik: prof.dr  
S. Hornung; z Zakladu Anatomii Patologicznej w Krakowie. Kierownik:  
prof.dr J. Kowalczykowa i Z Sanatorium im. Chalubinskiego w Zakopa-  
nem. Dyrektor: dr E. Paryski.  
(TUBERCULOSIS exper.)

HORNUNG, Stanislaw; KOWALCZYKOWA, Janina; KULIG, Andrzej; POLONCZYK,  
Mieczyslaw; ROKITA, Zofia; SMACZNA, Danuta.

Effect of INH and SM therapy of experimental tuberculosis  
caused by strains with a low INH-resistance. *Gruzlica* 31  
no.12:1177-1184 D'63.

1. Z Kliniki Ftizjatrycznej (kierownik: prof. dr. St. Hornung)  
i z Zakładu Anatomii Patologicznej AM w Krakowie (kierownik:  
prof. dr. J. Kowalczykowa).

\*

POŁONCZYK, MIECZYSLAW

HORNUNG, Stanislaw; AMALOWICZ, Franciszek; BRONA, Zbigniew; HECIUK-SZCZERBINSKI, Zbigniew; PAHYSKI, Edwin; POŁONCZYK, Mieczysław; RAPP, Tadeusz

Results of team research on the effects of bromsalicylhydroxamic acid, T 40, on drug resistance in tuberculosis. Gruzlica 25 no.9:702-708 Sept 57.

1. Z Instytutu Gruzlicy w Warszawie, Kliniki Ptizjatrycznej A. M. w Krakowie Sanatoriów w Bulowicach, w Gornie, w Wysokiej Lacie, im. Chalubinskiego w Zakopanem.

(TUBERCULOSIS, ther.

salicylohydroxamic acid, eff. on isoniazid & PAS resist. patients (Pol))

(SALICYLIC ACID, related cpds.

salicylohydroxamic acid ther. of tuberc., eff. on isoniazid & PAS resist. patients (Pol))

POLONCZYK, M.

POLAND/Pharmacology and Toxicology - Chemotherapeutic Preparation V-9  
Antitubercular Drugs.

Abs Jour : Ref Zhur - Biol., No 14, 1950, 66424

Author : Hornung, S., Polonczyk, M., Kapf, T.

Inst : -

Title : The Results of a Study of the Inhibitory Effect of the Preparation T40 (Sodium Salt of Bronsalicylohydroxamic Acid) on Drug Resistance in Tuberculosis.

Orig Pub : Gruzlica, 1956, 24, No 5, 335-339.

Abstract : A study was made of the sensitivity of tubercle bacilli (TB) to isoniazid (I) and streptomycin (II) in a combined treatment with T40. Thirty-five patients were under observation during the course of treatment. The resistance of bacteria, from the sputum, to (I) and (II) was determined (the methods are outlined). After the treatment which lasted 2-5 months, TB were found in the sputum of 11 patients. The author believe that in this method of

Card 1/2



HORNUNG, Stanislaw; POLONCZYK, Mieczyslaw; DELOFF, Leonard; DERUBSKA, Barbara; GARNUSZEWSKI, Zbigniew; JAROSZEWICZ, Wiwa; JAWORSKI, Jan; MYSAKOWSKA, Helena; PARYSKI, Edwin; PECAK, Wladyslaw; PREGOWSKI, Wladyslaw; SOSNOWSKI, Wacław; WESTFAL, Irena; ZIERSKI, Marian

Primary resistance to basic antitubercular drugs in pulmonary tuberculosis patients observed in Poland during the period of 1961-1962. Gruzlica 32 no.8:629-636 Ag '64.

HORNUNG, Stanislaw; POLONCZYK, Mieczyslaw; RAPF, Tadeusz

Effect of investigations on the effect of the preparation T-40  
(sodium salt of bromosalicylohydroxamic acid) on drug resistance  
of tuberculosis; preliminary communication. Gruzlica 24 no.5:  
335-339 May 56.

1. Z Kliniki Ftyjatrycznej A.M. w Krakowie Kierownik: prof. dr.  
St. Hornung.

(SALICYLIC ACID, related compounds,  
salicylohydroxamic acid, ther. of tuberc. resist. to  
other drugs (Pol))  
(TUBERCULOSIS, therapy.  
salicylohydroxamic acid in cases resist. to other drugs  
(Pol))

APPROVED FOR RELEASE: 06/15/2000  
HORNUNG, Stanislaw; POLONCZYK, Mieczyslaw

CIA-RDP86-00513R001341820008-4"

Primary resistance to principal drugs in patients with pulmonary  
tuberculosis. Gruzlica 30 no.4:349-358 '62.

1. Na podstawie materialow dostarczonych przez: Kliniki AM, SDL w  
Bialymstoku Krakowie, Lublinie, Lodzi i Zabrze, Instytut Gruzlicy w  
Warszawie oraz Sanatorium w Rabce i w Zakopanem.

(ANTITUBERCULAR AGENTS ther)

HORNUNG, Stanislaw; KOWALCZYK, Janina; KULIG, Andrzej; KULIG, W.  
Mieczyslaw; RYBA, Tefia; SZCZEPAN, Janina

The course and morphological picture of experimental tuberculosis  
in guinea pigs produced with strains of *Mycobacterium tuberculosis*  
isolated from INH treated patients. III. Effect of the treatment  
with large doses of INH on experimental tuberculosis caused by  
strains with low INH resistance. Gruzlica 32 no.5:423-429 Ry '64.

1. Z Kliniki Pneumatycznej (Kierownik: prof. dr. S. Hornung) i  
z Zakładu Anatomii Patologicznej Akademii Medycznej w Krakowie  
(Kierownik: prof. dr. J. Kowalska).

POLONEC, A.

Organization of the commercial life of linen weavers in the Upper Orava region.

p. 49.

SLOVENSKY NARODOPIS, Bratislava, Vol. 3, no. 1, 1955.

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, no. 10, Oct. 1955,  
Uncl.

PCLO 10, 4.

Polonec, A. Organization of the commercial life of linen in the  
Upper Odra region. P. 40. SLOWENSKY HANDBOOKS. Bratislava. Vol. 3,  
no. 1, 1955.

SO: Monthly List of the East European Accession, (SEAL), LC. Vol. 4,  
no. 10, Oct. 1955. Uncl.

POLONETS, Galina [Polonets', Halyna], zven'yevaya

Lavish gifts of our land. Znan.ta pratsia no.2:8-9 P '60.  
(MIRA 13:5)

1. Kolkhoz im. Leninskogo komsomola Ruzhinskogo rayona, Zhitomir-  
skaya oblast'.

(Ruzhin District---Corn(Maize))

POLONETSKAYA, B.N.

Ultrahigh frequency therapy in the compound treatment of Botkin's disease. Vop. kur., fizioter. i lech. fiz. kul't. 30 no.4:315-318 J1-Ag '65. (MIRA 18:9)

1. Fizioterapevticheskoye otdeleniye (zav. B.N. Polonetskaya) Murmanskoy oblastnoy bol'nitsy (glavnyy vrach A.F. Pavlova).

TSINTSERLING, A.V.; POLONSKAYA, Ye.V.; TARASOVA, A.P.; LYUBAVIN, A.R.;  
NABOKOVA, Ye.R.; MASLENNIKOVA, L.K.; MAYOROVA, L.P. (Leningrad)

Pathological anatomy of adenovirus lesions of the lungs in children.  
Ark. pat. 27 no.10:21-28 '65. (MIRA 18:10)

1. Institut detskikh infektsiy i Institut imeni Pastera, Detskaya  
bol'nitsa imeni N.F.Filatova, Detskaya bol'nitsa imeni "Simbalina  
i 1-ya detskaya bol'nitsa Oktyabr'skogo rayona, Leningrad.



POLONETSKIY, S. D.

35381 Mekhanizatsiya Snegodovogo Poseva Lesnykh Polos. Les I Step', 1949, No. 5,  
S. 65-66

SO: Letopis' Zhurnal'nykh Statey Vol. 34, Moskva, 1949

MAN'KOV, D.F.; OREKHOV, N.I.; POLONETSKIY, S.D.; NELYUBOVA, Ye.I.,  
red.; DUDAKOV, V.A., tekhn. red.; OKOLELOVA, Z.P.,  
tekhn. red.

[Agricultural machines] Sel'skokhoziaistvennye mashiny.  
Moskva, Sel'khozizdat, 1963. 502 p. (MIRA 17:3)

MANUKOVSKIY, N.F.; POLONETSKIY, S.D.; OREKHOV, N.I.; SYCHEV, A.F.;  
BOLDYREV, M.D.; SEMENOV, V.M., nauchnyy red.; KRYUCHKOV,  
V.L., red.; CHIRKOV, A.Ya., red.; PERSON, M.H., tekhn. red.

[Over-all mechanization of corn growing and harvesting] Kom-  
pleksnaia mekhanizatsiia vozdel'yvaniia i uborki kukuruzy.  
Moskva, Proftekhizdat, 1962. 118 p. (MIRA 16:2)  
(Corn (Maize)) (Farm mechanization)

KOLESNICHENKO, M. V., IOICHNETSKII, S. D.

Afforestation - Voronezh (Province)

Condition of spot seeding of oak by mechanical means. Les i step, <sup>h</sup>, No.2, 1952.

Monthly List of Russian Accessions, Library of Congress, June 1952.  
Unclassified.

POLONIC, P.; POLONIC, Gabriela

Geologic research in the Gura Humorului-Draceni region.  
Dari seama sed 47:239-252 '59/60 [publ. '62].

Contributions to the geologic study of the Chiuzaia  
(Baia Mare) region. Ibid. 253-262.

POLONIC, P.; POLONIC, Gabriela

~~Polonic, Gabriela~~  
Geologic research in the Gura Humorului-Draceni region.  
Dari seama sed 47:239-252 '59/60 [publ. '62].

Contributions to the geologic study of the Chiuzaia  
(Baia Mare) region. Ibid. 253-262.

POLONIA, A.I.

POLONIK, A.I., inzh.

Preparing steel shavings for use as steel furnace charge. Mashino-  
stroitel' no.10:41 0 '57. (MIRA 10:11)  
(Steel---Metallurgy)

FOLONIK, A. I.

PA 195T59

USSR/Metals - Foundry, Methods

May 51

"Hydraulic Cleaning of Castings and Recovery of Molding Sand," A. V. Kiselev, Laureate of Stalin Prize, A. I. Polonik, Engineers, Ural-mashzavod

"Litye Prolzvod" No 5, pp 15, 16

Complex installation consists of 6 x 7 x 4-m hydraulic chamber with high-pressure pump, receiver for pulp, mechanisms for pumping pulp on recovering installation, installation itself, settling tank for used water and receivers for

195T59

USSR/Metals - Foundry, Methods (Contd) May 51

recovered sand and sludge. Recovery of sand amounts to 75% with av productive capacity approximately 4 cu m/hr. Operation requires 5 men.

195T59



POLONIK, A.I.; CHIMINOV, V.V.

Casting steel bearings for rolling mill stands. Lit.proizv.no.2  
supplement:41-42 '56. (MLRA 9:7)  
(Steel castings) (Bearings (Machinery))

POLONIK, A.I.

Precision steel castings. Lit.proizv. no.2 supplement:11-18 '56.  
(Steel castings) (MIRA 9:77)

POLOWIK, P. A.

23357 organichitel' zholostogo zhoda. tekstil. prom-St', 1949, No. 7, c. 39-40

SO: LETOPIS NO. 31, 1949

POLONIK, P.A.

34005 POLONIK, P.A. Dnyevnoy Svyet  
Na Fabrikve Tyekstil Prom-st  
1949, No. 10. S. 37-38

SO: Letopis' Zhurnal'nykh Statey, Vol. 42, Moskva, 1949

*FLONIA, B.A.*  
SOSNO SKIY, Andrey Anan'yevich; POLONIK, Pavel Arsen'yevich, inzhener.  
KHOKHLOV, Viktor Dmit'riyevich, inzhener; SHTEYNBOK, G.Yu., inzhener,  
nauchchiy redaktor; BRYANTSEVA, V.P., inzhener, vedushchiy redaktor;  
VUL'MAN, G.L., inzhener, redaktor; POROMOREV, V.A., tekhnicheskii redaktor.

[Instrument for recording positions of transmitting synchros and  
potentiometric transmitters] Pribor dlia zapisi polozheniia sel'-  
sinnykh i potentsiometricheskikh datchikov. Pribory dlia obnaru-  
zheniia i izmereniia elektro-staticheskikh zariadov na tekstil'nykh  
materialakh. Moskva, 1956. 19 p. (Pribory i stendy. Tene 5m no.P-  
56-526) (MLRA 10:10)

1. Moscow. Vsesoyuznyi institut nauchnoy i tekhnicheskoy informatsii.  
Filial.  
(Recording instruments) (Textile fabrics--Electric properties)

POLONIK, P.A., inzhener.

Daylighting in shops with shed roofs. Tekst.prom. 16 no.4:53  
Ap '56. (Textile factories--Lighting) (MIRA 9:7)

POLONIK, P.A.

21 (8)

Veroyatnost' razvitiya i primeneniya radioaktivnykh izotopov v nauke i tekhnologii. (Probability of development and application of radioactive isotopes in science and technology). Moscow, 1957. 128 p. 4,500 copies printed.

Trud'ye nauchnykh i inzhenernykh spetsialistov po ispol'zovaniyu radioaktivnykh izotopov v nauke i tekhnologii. (Works of scientific and engineering specialists on the use of radioactive isotopes in science and technology). Moscow, 1957. 128 p. 4,500 copies printed.

Sponsoring Agencies: USSR, Gendarmen-uravneniye po ispol'zovaniyu radioaktivnykh izotopov v nauke i tekhnologii. (Equalization of the use of radioactive isotopes in science and technology). Moscow, 1957. 128 p. 4,500 copies printed.

Editorial Board of Sci. V.I. Belyanin, Academician (Resp. Ed.), V.M. Shumilovskiy (Chief Resp. Ed.), Yu. S. Zaslavskiy (Deputy Resp. Ed.), B. K. Katsirko, B.I. Verbovskiy, S.T. Nazarov, L.I. Petrenko and B.D. Zeleninskaya (Secretary).

Ed. of Publishing House: P.M. Belyanin; Tech. Ed.: T.P. Polonova.

Purpose: This book is intended for specialists in the field of machine and instrument manufacture who use radioactive isotopes in the study of materials and processes.

COVERAGE: This collection of papers covers a very wide field of the utilization of tracer methods in industrial research and control techniques. The topic of this volume is the use of radioactive isotopes in the machine- and instrument-manufacturing industry. The individual papers discuss the applications of radioactive isotopes in the study of metals and alloys, problems of friction and lubrication, metal cutting, engine performance, problems of defects in the metal, etc. Several papers are devoted to the use of radioisotopes in the automation of industrial processes, recording and measuring devices, radioisotope counters, etc. These papers represent contributions of various Soviet institutes and laboratories. They were published as Transactions of the All-Union Conference on the Use of Radioactive and Stable Isotopes and Radiation in the National Economy and Science, April 4-12, 1957. No personalities are mentioned. References are given at the end of most of the papers.

Auzan, Ya. A., V.K. Benashok, Kh.K. Gurne, I.M. Tatars, A.B. Chuprikov, P.K. Chaplinsky, I.A. Kymnis, and V.A. Yanushkovskiy (Institut fiziki AN Latvyskoy SSR, zavody "RSP", "Kosmopress", "Dzinmars" - Institute of Physics, Academy of Sciences, Latvian SSR; "VEP", "Kompressor", and "Dzinmars" Plants). Automation and Control Equipment With Radioactive Relays 259

Segalina, V.G. (Vsesoyuznyy nauchno-issledovatel'skiy uchebnyy institut - All-Union Scientific Coal Institute). Gamma Rays With Crystal Tricodes 264

Klemmer, E.S. Evaluation of the Minimum Necessary Charge of Counters in a Gamma Relay 266

Shumilovskiy, M.M., Yu.V. Gushchin, and M. I. Tolokomilov (Institut avtomatiki i telemekhaniki AN SSSR - Institute of Automation and Telemekhanics, Academy of Sciences, USSR). Use of Radioactive Isotopes for the Automatic Control of the Flow of Liquids 267

Kryzhanovskiy, V.Y., I.I. Saf'yants, and V.A. Yanushkovskiy (Institut fiziki Akademii nauk Latvyskoy SSR i Leningradskiy stateprokatnyy zavod - Institute of Physics, Academy of Sciences, Latvian SSR; Leningrad Steel Rolling Mill). Use of Short-lived Isotopes in the Control of the Process of Steel Strip Manufacture 271

Shumilovskiy, M.M., and L.V. Mel'tser (Institut avtomatiki i telemekhaniki AN SSSR - Institute of Automation and Telemekhanics, Academy of Sciences, USSR). Use of Radioactive Radiations in the Noncontact Control of the Volume and Velocity of a Stream of Gas 276

Rabe, Ya. Yu., and D.M. Ziv. Use of Alpha Emitters for the Measurement of Gas Density 280

Jordan, G.D., K.S. Furman, and T.D. Mayman (Nauchno-issledovatel'skiy institut teploenergeticheskogo priborostroyeniya - Scientific Research Institute for Heat-Power Instrument Making). Equipment for the Automatic Control of Gas Flow by Means of Beta Radiation 286

POLONIK, P.A., inzhener.

Effective lighting system of weaving mills. Tekst.prom. 17  
no.6:48-51 Je '57. (MLRA 10:7)

(Textile factories--Lighting)



AUTHOR: Polonik, P. A., Engineer

SCV/105-58-8-4/21

TITLE: Electric Properties of Artificial and Synthetic Fibers  
(Elektricheskiye svoystva iskusstvennykh i sinteticheskikh volokon)

PERIODICAL: Elektrichestvo, 1958, Nr 8, pp. 17-21 (USSR)

ABSTRACT: The humidity content in fibers has a decisive influence on its specific resistance and on the electrification. The humidity, however, in a defined manner is connected with atmospheric humidity. The measurement of the specific resistance is described, that of oily fibers used for a reduction of electrification during working as well as that of fibers without oil at different relative humidities. Measurements were conducted by means of a ballistic galvanometer. The measuring method and the production of the samples is described. The experiments show, that to each fiber a certain limit charge is coordinated under certain external conditions. This limit of charge density is explained as follows: 1) The double layer between surfaces which are in contact can be considered as a condenser with a very high capacity, in which the field strength may reach values

Card 1/2

Electric Properties of Artificial and Synthetic  
Fibers

S07/105-58-8-1/21

of  $10^7$  V/cm. 2) The second cause for this phenomenon is the leakage, as every dielectric has a certain, however small conductivity. A method of measuring the electrification of the fibers is described. As a summary it is stated: 1) All artificial and synthetic fibers are considerably polarized during working. The charge on the respective fiber is dependent upon the relative humidity and the velocity of the motion of the fiber. 2) No connection exists between the specific resistance of the fibers and its electrification. A complete dependence exists between the specific resistance of the fiber and the leakage. 3) Only viscous and acetate fibers can be worked without disturbances caused by static electricity at  $\varphi = 65\%$ , where  $\varphi$  denotes the relative atmospheric humidity. In the working of synthetic fibers they must be kept for 20-30 hours at  $\varphi = 75\%$  and more in order to neutralize the charges. Otherwise an ionization of the air must be applied. There are 7 figures, 2 tables, and 6 references, all of which are Soviet.

Card 2/3  
2

*Cent. Sci. Res. Inst. of Silk*

KHOKHLOV, V.D.; POLONIK, P.A.

High-frequency ionizers used for neutralizing static electricity  
charges. Biul.tekh.-ekon.inform. no.11:47-48 ' 58.  
(MIRA 11:12)

(Ionization of gases) (Electrostatics)

POLONIK, P.A., inzh.

More on the efficiency of lighting systems in weaving plants.

Tekst. prom. 18 no.11:35-36 N '58.

(MIRA 11:12)

(Textile factories--Lighting)

POLONIK, P.A., inzh.; KHOKHLOV, V.D., inzh.

Instruments for measuring and neutralizing charges of static  
electricity. Log.prom. 18 no.12:32-35 D '58. (MIRA 11:12)  
(Electric meters)

POLONIK, P. A., Cand of Tech Sci -- (Miss) "Studying the Possibility and Development of Methods for Eliminating Electrostatic Charges During Treatment of Artificial and Synthetic Fibers," Moscow, 1959, 18 pp (Moscow Textile Institute) (KL, 8-60, 117)

ANDRASOV, Viktor Fedorovich; BERSHEV, Yevgeniy Nikitich; POLONIK,  
P.A., retsenzent; DUKHOVNIY, F.N., red.

[Electrostatic nap coating of fabrics] Elektrostaticheskoe  
vorsovanie. Moskva, Legkaya industriya, 1965. 62 p.  
(MIRA 18:3)

POLONIK, Pavel Artem'yevich; SHVIREV, S.S., red.; SOKOLOVA, V.Ye., red.;  
KNAKNIN, M.T., tekhn.red.

[Electrifiable nature of synthetic fibers and its control]  
Elektrizuemost' khimicheskikh volokon i bor'ba s nei. Pod red.  
S.S.Shvyreva. Moskva, Nauchno-tekhn.izd-vo lit-ry po legkoi  
promyshl., 1959. 94 p. (MIRA 13:3)  
(Textile fibers, Synthetic) (Electrostatics)





(A) L 12022-66 EWT(m)/EPF(n)-2/EWP(j)/T RM  
ACC NR: AT5028948 SOURCE CODE: UR/0000/63/000/000/0223/0225  
AUTHOR: Polonik, P. A.  
ORG: none  
TITLE: Use of alpha and beta emitters to combat static electricity in the textile industry  
SOURCE: Vsesoyuznyy seminar po primeneniyu radioaktivnykh izotopov v izmeritel'noy tekhnike i priborostroyenii, Frunze, 1961. Radioizotopnyye metody avtomaticheskogo kontrolya (Radioisotope methods of automatic control); trudy rasshirennogo soveshchaniya, v. 1. Frunze, Izd-vo AN KirgSSR, 1963, 223-225  
TOPIC TAGS: promethium, plutonium, radioactive source, textile industry machinery  
ABSTRACT: A promethium-147 beta source with an 800  $\mu$ C total activity was mounted on a warping machine at the Krasnaya Roza Combine to neutralize electrostatic charges. Industrial checking of the effectiveness of this source showed that the latter permits the warping of acetate silk without additional lubrication at speeds from 150 to 350 m/min. A promethium-147 beta source was also tested at the Naro-Fominsk Spinning

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ACC NR: AT5028948

Mill on two ribbon lapping machines; the number of cases of windings on cylinders or rolls was 52 with the source and 175 without it. A plutonium-239 alpha source with an activity of 2.5  $\mu$ C was tried at the Krasnaya Roza Combine on a Sellers shearing machine and found to be very effective in neutralizing the electric charge. A 10  $\mu$ C plutonium-239 source was permanently installed on the warping machine at the Krasnaya Roza Combine.

SUB CODE: 14/ SUBM DATE: 21Mar63/ ORIG REF: 000/ OTH REF: 000

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POLOMIK, P. A., kand. tekhn. nauk, starshiy nauchnyy sotrudnik

New type of ionizing static eliminator. Tekst. prom. 23 no.3:  
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promyshlennosti (TSNIIIShelka).

(Textile machinery—Electric properties)  
(Air, Ionized—Industrial applications)

POLONIK, P. A.

"The Application of Alpha and Beta Radiating Isotopes in the  
Electrification of the Textile Industry"

paper presented at the All-Union Seminar on the Application of  
Radioactive Isotopes in Measurements and Instrument Building,  
Frunze (Kirgiz SSR), June 1961)

So: Atomnaya Energiya, Vol 11, No 5, Nov 61, pp 468-470

POLONIK, Vladimir Stepanovich; SAPRYKIN, K.V., retsenzent; SOKOLOV,  
V.I., red.; SOBOLEVA, Ye.M., tekhn. red.

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POLONIK, V. S. -- "On the Clearness of the Television Images Produced by the Synchronization of Impulses and Fluctuation Interference." Leningrad Institute of Aviation ~~and~~ Instrument Making, Leningrad, 1956. (Dissertation for the Degree of Candidate of Technical Sciences)

SO: Knizhnaya Letopis' No 43, October 1956, Moscow

POLONIK, V.S.

В. С. Полоник

Современное состояние и перспективы применения телемеханики в промышленности, науке и сельском хозяйстве СССР.

М. Е. Кавец

Разработка унифицированного телемеханического и измерительного оборудования различного назначения для телемеханики.

Р. Е. Виноградов

С. В. Гурьев

Применение телемеханики в промышленности и сельском хозяйстве СССР.

Р. Е. Виноградов

С. В. Гурьев

(1) анализ структуры науки по структуре телемеханики и ее роли в развитии техники и технологии.

11 июня

(с 10 до 16 часов)

В. А. Булавин

Структура науки телемеханики

В. М. Балашов

Анализ телемеханики для Механического института

20

В. Н. Ефимов

Современность системы телемеханики с использованием телемеханики, выполняющей для телемеханики ОМД и МЭДР.

Г. Н. Соколов

Применение телемеханики в промышленности

11 июня

(с 10 до 22 часов)

О. В. Ефимов-Челом

Общая концепция телемеханики и ее роль в развитии техники и технологии.

А. М. Шаповалов

А. М. Шаповалов

Применение телемеханики в промышленности

А. М. Шаповалов

Выбор рационального метода телемеханики для телемеханики и телемеханики телемеханики

А. Г. Виноградов

В. М. Балашов

Краткое описание телемеханики и телемеханики телемеханики

20

report submitted for the Centennial Meeting of the Scientific Technological Society of Radio Engineering and Electrical Communications in A. S. Popov (VSEI), Moscow, 6-12 June, 1959



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SOURCES: EEAL - LC Oct. 1956. Vol. 5 No. 10

z/019/62/019/003/005/006  
D006/D102

AUTHOR: Polonnik, I.A.

TITLE: Radioactive radiation as a source for air ionization to neutralize electrostatic charges in synthetic fiber processing

PERIODICAL: Přehled technické a hospodářské literatury, Energetika a elektrotechnika, v. 19, no. 3, 1962, 132, abstract # E 62-1792.  
Gostoptekhizdat, Moscow, 1961, STK II-182721

TEXT: This item is a part of a collection (pp54-58) entitled in Russian Radioaktivnyye izotopy i yadernyye izlucheniya v narodnom khozyaystve SSSR (Radioactive isotopes and nuclear radiation in the national economy of the USSR), Volume II. [Abstracter's note: Complete translation.]

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PA 236T57

USSR/Electronics - Oscillator

Oct 5;

"Generators of Subsonic Frequencies," D. Ye. Polonnikov and K. E. Erglis

"Zhur Tekh Fiz" Vol 22, No 10, pp 1677-1686

Authors consider the peculiarities of operation of RC oscillators in the subsonic range of frequencies. Describe two experimentally verified circuit schemes for voltage generators in the range of frequencies 0.05 to 50 cps. Variation in oscillator frequency does not exceed 0.05%, and variation of amplitude

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does not exceed 0.2% for fluctuations in the supply voltage of 5 to 10% and during change-over of frequency over the entire range. Cite A. M. Bonch-Bruyevich, K. F. Teodorovich (1948).

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POLONNIKOV, D. YE.